



OSTEOID OSTEOMA IN LESSER TROCHANTER-IN SUBPERIOSTEAL LOCATION

Orthopaedics

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ABSTRACT

Osteoid osteoma is a benign tumour accounting for around 5% of all bone tumours and 11% of benign bone tumours with male predilection<sup>2</sup>. Osteoid Osteoma is benign tumour of young males and females between 10 and 30 years affecting long bones tibia, femur and other sites such as spine, humerus. It is classified based on location as cortical, cancellous or sub periosteal. Nocturnal pain is most common symptom that usually responds to salicyclates and Non steroidal anti inflammatory medications<sup>2</sup>. x-ray shows small central radiolucent nidus of <1.5cm. CT is modality of choice not only for diagnosis but also for specifying location of lesion i.e cortical or sub cortical or medullary. Newer surgical procedures include radiofrequency ablation, CT guided percutaneous bone resection and drilling<sup>3,5,6</sup> and en bloc resection.

KEYWORDS

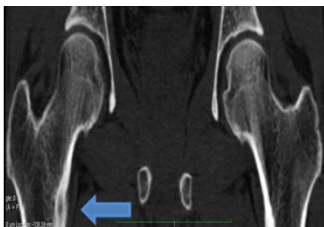
Osteoid osteoma, sub periosteal

INTRODUCTION:

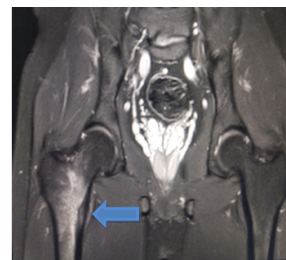
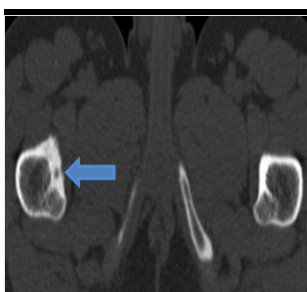
Osteoid osteoma was first described by Dr.Jaffe in 1935 as a benign bone tumor<sup>3</sup>. Many hypothesis exist regarding pathophysiology of osteoid osteoma. One proposal is that the formation of tumor may be due to neoplasia or is the result of prior trauma to the area. Nerve fibres have been identified within the nidus by special immunohistochemical techniques. Nerve fibres are stimulated by increased blood flow to the area from the release of prostaglandins resulting in pain to that area<sup>1</sup>. Prostaglandins are found in the nidus at levels 100 to 1000 times that of normal tissue<sup>4</sup>. Osteoid osteoma in sub periosteal location of lesser trochanter is rare. The early diagnosis and prompt treatment is of utmost importance for good clinical outcome.



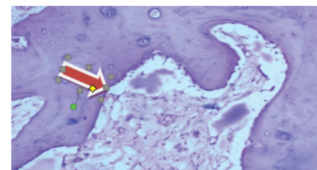
PRE OPXRAY(PIC 1)



CT CORONAL VIEW (PIC 2)



PIC 3&4



HPE:PIC 5



POST OPX-RAY (PIC 6)



POST OPX-RAY AT 2MONTHS(PIC 7)

CASE REPORT:

A 21 year man presented to orthopaedic OPD with chief complaints of

pain in right hip since 10 months , progressive, dull aching , aggravated during night and relieved with NSAIDS not associated with swelling. No history of trauma or fever or weight loss or loss of appetite.

**O/E:** Tenderness present at right scarpa's triangle with all terminal movements are painful.

**Radiograph** pelvis with both hips-AP view shows ill-defined lytic lesion in right lesser trochanter. Chest radiograph is normal. CT scan pelvis with both hips done shows lucent nidus with adjacent cortical thickening and sclerosis. MRI of both hips done shows hyperintense on T2W with central dot of hypo intensity in lesser trochanter.

Under Spinal anaesthesia using Ludloff approach resection of bone tumour was done and sent for HPE HPE shows sclerotic trabeculae with osteoblastic rimming Follow up radiograph was taken at 2months which showed no recurrence.

#### **CONCLUSION:**

Resolution of symptoms from conservative management has been documented to occur at 33 months, but there are negative effects of long term NSAIDS use<sup>1</sup>. Localization of nidus is not always possible. Extensive resection is necessary to ensure complete removal. Excision of excessive bone results in weakening of bone, prolonged healing time, high risk of fractures. Lytic lesion with long duration should never be ignored. Complete resection of tumour will have relief of pain completely and good range of movements and have excellent results than conservative treatment. Prompt diagnosis and treatment of this curable disease remain critical for initiation of proper management and permanent bone destruction.

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